

# PATENT SPECIFICATION

DRAWINGS ATTACHED

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## COMPLETE SPECIFICATION

### Improvements in or relating to Indenting Tools

I, ALOIS SCHIFFMANN, of 15 Streifeldstrasse, Munich 8, Germany, a German citizen, do hereby declare the invention, for which I pray that a patent may be granted to me, and the method by which it is to be performed, to be particularly described in and by the following statement:—

This invention relates to indenting tools of the kind comprising a head with jaws in which a fixed indenting insert is mounted exchangeably, and on the head is arranged a slider, to which is fitted a second indenting insert, the slider being moved towards and away from the fixed indenting insert by means of hand levers which are connected to the head by means of links and are pivotally mounted on the slider. Such tools are often used for clamping electric cable terminals or connectors and in these instances it is important that the sleeve to be clamped is engaged over almost its entire periphery by the indenting inserts and clamped with the cable conductor so as to achieve high security and conductivity. It is possible to fit inserts which do not indent but give the conductor a circular cross-section before it is introduced into a connector sleeve.

According to the present invention there is provided a tool of the kind referred to, characterised in that the hand levers are spaced from one another and are connected with one another by means of meshing toothed segments which affect the power transmission ratio, and that the links are connected to the head by journal pins which serve as guiding means for the slider.

The accompanying drawing shows an example of a tool in accordance with the invention

In Figures 1 and 2 in side view in the clamping and open position respectively, and

In Figure 3 there is shown a cable terminal after it has been clamped with the indenting tool, in perspective view.

The illustrated indenting tool comprises a head 1 with jaws 2 in which is mounted an indenting insert 3 fixed in position but never-

theless exchangeable. On the head 1 is arranged a slider 4 to which is fitted a second indenting insert 5, likewise exchangeable. The two indenting inserts 3 and 5 are held by means of detent devices 6 in the form of spring-influenced pawls which engage in the indenting inserts 3 and 5, see Figure 1.

On the head 1 and at both sides of the slider 4, by means of journal pins 7, are pivotally attached pairs of links 8 which are connected by journal pins 9 with two hand levers 10. The hand levers 10 are pivotally mounted on the slider 4 by means of journal pins 11 and are in operative connection with one another by means of toothed segments 12 which turn on the journal pins 11.

Upon spreading apart of the hand levers 10 from one another the slider 4 is moved so that the indenting inserts 3 and 5 are brought into the open position (see Figure 2), and an electric conductor with a terminal can be introduced between the indenting inserts, or it is possible to introduce the terminal between the indenting inserts and then to insert the conductor into the sleeve of the terminal. After the terminal and conductor are inserted the hand levers 10 are moved towards one another (see Figure 1) and thereby the indenting inserts 3 and 5 are pressed into the terminal sleeve so that an indentation as shown by way of example in Figure 3 can be obtained.

If a conductor of non-circular cross-section is firstly to be made cylindrical, instead of the indenting inserts 3 and 5 suitable shaping pieces are fitted to the tool.

The transmission ratio can be altered, in case of need, as the toothed segments 12 may be replaced by larger or smaller ones if the slider 4 is provided with two or more sets of holes for accommodating the journal pins 11 of the toothed segments 12.

WHAT I CLAIM IS:—

1. An indenting tool of the kind comprising a head with jaws in which a fixed indenting insert is mounted exchangeably, and on the head is arranged a slide to which

[Price 3s. 6d.]

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- is fitted a second indenting insert, the slider being moved towards and away from the fixed indenting insert by means of hand levers which are connected to the head by means of links and are pivotally mounted on the slider, characterised in that the hand levers are spaced from one another and are connected with one another by means of meshing toothed segments which affect the power transmission ratio, and that the links are connected to the head by journal pins which serve as guiding means for the slider.
2. An indenting tool according to claim 1, comprising detent devices for holding the indenting inserts, characterised in that the detent devices consist of spring-influenced pawls engaging in the indenting inserts.
3. An indenting tool according to claim 1 or 2, characterised in that the slider is provided with two or more sets of holes for accommodating journal pins of the toothed segments so that the latter may be exchanged for the purpose of altering the transmission ratio.
4. An indenting tool of the kind referred to, constructed and arranged substantially as hereinbefore described with reference to and as shown in Figures 1 and 2 in the accompanying drawing.
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